

USSR/Virology - Human and Animal Viruses.

E-2

Abs Jour : Ref Zhur - Biologiya, No 1, 1957, 413

material under investigation. Different series of rabbits showed a reaction of hemagglutination titer of 1:16 to 1:512. The titer in the surface shavings of the infected vaccines was found to be considerably lower than in the shavings of the deeper layers. Hemagglutinins were also found in the material taken from skin shavings of a ram and the heifer. Attempts were made to discover the vaccine virus by a reaction of hemagglutination in isolated mucous membrane of the pharynx, blood, and urine of vaccinated animals and children. In the materials obtained from the mucous membranes of the pharynx and the mouth in which smallpox elements developed, hemagglutinins in dilution 1:128 were found, while in those with cutaneous vaccination hemagglutinins were found in only inconsiderable quantities, and then in only part of the experimental animals (in infection of a large skin area). A reaction

Card 2/3

USSR/Virology - Human and Animal Viruses.

E-2

Abs Jour : Ref Zhur - Biologiya, No 1, 1957, 413

hemagglutination test of the isolated pharynx, blood, and urine obtained from vaccinated children produced a negative result; in a group of revaccinated children 7 to 8 years of age, the virus in the isolated pharynx was found in dilution of 1:2 to 1:4 in 3 of 10 children beginning from the 2nd to the 20th day after the vaccination. On the basis of their observations the authors come to the conclusion about the inadequate sensitivity of RGA for the discovery of small numbers of the virus. With the aid of "RTGA" an accumulation of antivaccine antibodies in the sera of vaccinated rabbits, calves, and humans was established. On the 12th day after humans were revaccinated, the average titer of antibodies in the serum increased from 51.4 to 300.8.

Card 3/3

BAGLIKOV V. G.

USSR/Microbiology - Microorganisms Pathogenic to Humans and
Animals.

F-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9951

Author : Alferova, V.B., Baglikova, V.G., Georgievskaya, N.A.

Inst : -

Title : A Directed Alteration of Flexner Dysentery Strains so as
to Increase Immunogenicity.

Orig Pub : Vopr. Kraevoy patol. AN UzSSR; 1956, No 8, 3-10

Abstract : A strain of Flexner dysentery bacteria No 661, type V, of
weak virulence (1-2 billion microbial bodies per Dcl) and
immunogenicity (20-42% survival of immunized mice) was
cultivated on filtrates of broth cultures of highly immu-
nogenic and virulent strains of the same type. The viru-
lence of the "bred" strain was successfully considerably
diminished, and a variant with a lethal dose equal to 3-4
billion microbial bodies was obtained. Simultaneously
the immunogenicity was successfully increased

Card 1/2

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103010019-6"

USSR/Microbiology - Microorganisms Pathogenic to Humans and
Animals.

F-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9951

(up to 78 and 86% survival of immunized mice).
However, the acquired properties were retained for only 1
year, after which the virulence markedly increased and the
strain's immunogenicity decreased. A considerable number
of variants were obtained, distinguished from the initial
strain by their ability to decompose sucrose.

Card 2/2

BAGLIKOVA, V.G.; OSTROVSKAYA, S.G.; NESMEYANOVA, S.I.

Study of immunity to smallpox vaccine in Uzbekistan; state
of immunity to smallpox vaccine following the Great Patriotic
War. Trudy Tash. NIIVS 5:37-46'62. (MIRA 16:10)
(UZBEKISTAN — SMALLPOX) (IMMUNITY) (VACCINATION)

BAGLIUK, P.

Each decision checked. Munca sindic 6 no.7:13-15 J1 '62.

1. Presedinte al comitetului de intreprindere al Uzinei
Constructoare de vase "Nosenko", Nikolaev.

TOVBIN, M.V.; BAGLIY, T.G. [Bahlii, T.H.]

Desorption kinetics of acetic acid from activated coal. Nauk.zap.

Kyiv.un. 16 no.15:31-37 '57.

(MIRA 11:11)

(Acetic acid) (Sorption) (Carbon, Activated)

BAGLYUK, A.D.

The "K" coefficient of a factory. Sakh.prom. 38 no.1:12-13 Ja '64.
(MIRA 17:2)

1. Kamenskiy sakharnyy zavod.

BAGLYUK, A.D.

Rig for spraying beet fields with pesticides. Sakh.prom. 29 no.2:
39-41 '55. (MLRA 8:6)

1. Kamenskiy sakharovy zavod.
(Spraying and dusting equipment)

BAGLYUK, A.D.

Return of pulp press water and condensates to the reservoir. Sakh.
prom. 38 no.2:31 F '64. (MIRA 17:3)

1. Kamenskiy sakharnyy zavod.

BAGLYUK, A.D.

USSR /Chemical Technology. Chemical Products
and Their Application
Control and Measuring Devices.
Automatic Regulation.

4-3

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1578

Author : Baglyuk A.D.

Title : Automatic Device for Regulation of Fresh Water
Feed of Hydraulic Conveyers.

Vol. 31

Orig Pub: Sakharnaya prom-st', 1957, No 4, 45-46

Abstract: Description of the design and principle of operation of an automatic device for the regulation of fresh water fed to hydraulic conveyers, which has been developed at the Kamenskiy sugar refinery. Addition of fresh water into the receptacle is effected automatically, as determined by the level of the conveying and washing water contained in the receptacle.

Card 1/1

BAGLYUK, A.D.

Tube roller designed by N. Iaroshenko. Sakh. prom. 32 no.8:53-54
Ag '58. (MIRA 11:9)

1. Kamenskiy sakharnyy zavod.
(Arbors and mandrels)

BAGLYUK, A.D.; BANDYLOV, A.P.; MARISHCHENKO, V.V.; ANUCHIN, P.F.;
KRASNOSLOBODTSEV, N.A.; SAKUN, A.N.; KOZLOV, Ye.A.; KHOMENKO,
V.S.; MAKSIMUK, P.S.

Survey of letters and articles. Sakh. prom. 33 no.2:58-60
F '59. (MIRA 12:3)

- 1.Kamenskiy sakharney zavod (for Baglyuk). 2.Sokolovskiy sakhar-
ney zavod (for Bandylov). 3.Yagotinskiy sakharney zavod imeni
Il'icha (for Marishchenko). 4.Uzinskiy sakharney zavod (for
Anuchin). 5.Novo-Troitskiy sakharney zavod (for Krasnoslobodtsev).
- 6.Ukrigiproved (for Sakun). 7.Khutor-Mikheylovskiy rafinadnyy zavod
(for Kozlov). 8.Shpolyanskiy sakharney zavod (for Khomenko).
- 9.Kupyanskiy sakharney zavod (for Maksimuk).
(Sugar industry) (Sugar beets)

BAGLYUK, P.

Check how each decision is carried out. Sov. profsoiuzy 18
no.9:19-20 My '62. (MIRA 15:4)

1. Predsedatel' komiteta profsoyuza Nikolayevskogo sudostroitel'nogo
zavoda imeni Nosenko.
(Nikolayev--Shipbuilding) (Trade unions)

BAGMANOV, M.A.

Stratigraphy of the Eocene deposits of Talysh Mountains [in
Azerbaijani with summary in Russian]. Dokl. AN Azerb.SSR 13
no.5:511-517 '57. (MIRA 10:7)
(Talysh Mountains--Geology, Stratigraphic)

Б.А. Багманов, 11.11.

BAGMANOV, M.A.

Some mollusk species from upper Eocene deposits of the Talysh
Mountains. Izv. AN Azerb. SSR no.11:53-61 '57. (MIRA 11:1)
(Talysh Mountains--Mollusks, Fossil)

BAGMANOV, M.A.

Occurrence of the genus Tomostoma in Eocene deposits of Azerbaijan
(Talysh Mountains). Dokl.AN Azerb.SSR 13 no.10:1083-1086 '57.

(MIRA 10:12)

1. Institut geologii. Predstavleno akademikom AN AzerSSR M.M.Aliyevym.
(Talysh Mountains--Mollusks, Fossil)

BAGMANOV, M. A. Cand Geol-Min Sci -- (diss) "~~the~~ Eocene deposits of Gornyy Talysh (Biostratigraphy)." Baku, 1958. 20 pp (Acad Sci Azerbaydzhan SSR, Inst of Geology im Academician I. M. Gubkin), 100 copies (KL, 14-58, 110)

BAGMANOV, M.A.

Materials on the paleobionomy of the Eocene basin in the Talysh
Mountains [in Azerbaijani with summary in Russian]. Izv. AN Azerb.
SSR. Ser. geol.-geog. nauk no. 1: 53-61 '58. (MIRA 11:12)
(Talysh Mountains--Mollusks, Fossil)

ALIZADE, K.A.; BAGMANOV, M.A.

Eocene mollusks from the Talysh Mountains. Izv.AN Azerb.SSR.
Ser.geol.-geog.nauk no.2:15-24 '58. (MIRA 11:12)
(Talysh Mountains--Mollusks, Fossil)

BAGMANOV, M.A.

Study of Paleocene stratigraphy of the Talysh Mountains
[in Azerbaijani with summary in Russian]. Izv. AN Azerb. SSR.
Ser. geol.-geog. nauk no.3:17-27 '58. (MIRA 11:12)
(Talysh Mountains--Geology, Stratigraphic)

BAGMANOV, M.A.

New data on the geographical distribution of the subgenus *Semi-
vertagus* Gossmann. Dokl. AN Azerb. SSR 14 no.3:219-222 '58.

(MIRA 11:4)

1. Institut geologii AN AzerSSR. Predstavleno akademikom AN
AzerSSR M.M. Aliyevym.

(Talysh Mountains—Gastropoda, Fossil)

ALIYEV, R.A.; BAGMANOV, M.A.; MAMEDZADE, R.N.

New data on the presence of Cognac deposits in the Bazar-Chay basin [in Azerbaijani with summary in Russian]. Dokl. AN Azerb. SSR 14:781-787 '58. (MIRA 11:11)

1. Institut geologii AN Azerb. SSR.
(Bazar-Chay Valley--Geology, Stratigraphic)

ALIZADE, K.A.; BAGMANOV, M.A.; KERIMOV, B.G.

Maykop sediments of the southeastern Lesser Caucasus [in
Azerbaidjani with summary in Russian]. Dokl. AN Azerb. SSR 15
no.4:321-323 '59. (MIRA 12:6)

1. Institut geologii Akademii nauk Azerbaydzhanskoy SSR.
(Caucasus--Geology, Stratigraphic)

ALIZADE, K.A.; BAGMANOV, M.A.

Stratigraphy of Paleocene sediments in Kazakh District. Dokl. AN
Azerb.SSR 16 no.8:773-776 '60. (MIRA 13:9)

1. Institut geologii AN AzerSSR.
(Kazakh District--Geology, Stratigraphic)

ALIZADE, K.A.; BAGMANOV, M.A.

Patellidae and Capulidae from upper Eocene sediments Talysh Mountains.
Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no.4:11-19 '60.

(MIRA 14:1)

(Talysh Mountains--Mollusks, Fossil)

BAGMANOV, M.A.; ALIZADE, K.A., prof., red.; TIL'MAN, A., red. izd-va;
IBRAGIMOV, M., tekhn. red.

[Paleogene sediments of the Gornyy Talysh; stratigraphy and
molluscan fauna] Paleogenovye otlozheniia Gornogo Talysha;
stratigrafiia i molliuskovaia fauna. Baku, Izd-vo AN Azerb.SSR,
1963. 141 p. (MIRA 16:9)

(Talysh Mountains--Geology, Stratigraphic)
(Talysh Mountains--Mollusk, Fossil)

GREEN', L.K., akademik; BAYDUGANOVA, Ye.P., nauchnyy sotr.; SAVCHENKO, P.Ye., kand. biol. nauk; GREEN', Ye.K., kand. sel'khoz. nauk; KRYLOVA, L.F., nauchn. sotr.; SIDOROVA, L.M., nauchn. sotr.; SOROKINA, V.I., nauchn. sotr.; BAGMET, M.I.; LAZORENKO, Ye.L.; KHOKHLYUK, A.G.; PASHKEVICH, M.K.; BRYZHNIK, K.A.; LUZHKOV, M.A., kand. sel'khoz. nauk; BALASHOV, N.T., kand. sel'khoz. nauk; ZHELIKHOVSKIY, V.I., redaktor; POTOTSKAYA, L.A., tekhn. red.

[Ukrainian White Steppe swine] Ukrainskaia stepnaia belaia poroda svinei. Pod obshchei red. L.K.Grebenia. Kiev, Gos-sel'khozizdat USSR, 1962. 252 p. (MIRA 16:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut zhivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova."
 2. AN Ukr.SSR i Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for L.K.Greben').
 3. Ukrainskiy nauchno-issledovatel'skiy institut zhivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova" (for Bayduganova).
 4. Melitopol'skaya gosudarstvennaya plemennaya stantsiya (for Bagmet, Lazorenko, Khokhlyuk).
 5. Spetsialist sovkhoza "Komsomolets", Stavropol'skiy kray (for Bryzhnik).
- (Ukraine--Swine breeding)

BAGMET, N.S.

Practical application of the Marxist-Leninist theory of
agricultural cooperation in the Korean People's Democratic
Republic. Trudy KTIPP no.23:85-95 '60. (MIRA 15:1)
(Korea, North-Agriculture, Cooperative)

PALEYEV, Georgiy Anatol'yevich; VORONKOVA, V.V., inzh.-tekhnolog; SKRYP-
NIK, A.V., inzh., Laureat Stalinskoy premii, retsenzent; BAGMET,
V.P., inzh., retsenzent; SOROKOVY, A.V., inzh., retsenzent; NOZ-
DRINA, V.A., red.; SOKOLOVA, I.A., tekhn.red.

[Equipment for meat enterprises] Oborudovanie predpriatii
miasnoi promyshlennosti. Moskva, Pishchepromizdat, 1961. 428 p.
(Meat industry—Equipment and supplies) (MIRA 14:9)

POLYAK, M.S., kand. tekhn. nauk; BAGMET, V.S., inzh.

New electrodes for the hard facing of worn-out parts. Stroil.
i dor. mash. 8 no.11:35 N '63. (MIRA 17:1)

POLYAK, M.S., kand.tekhn.nauk; BAGMET, V.S., inzh.

New building-up alloys for increasing the strength of excavator
bucket teeth. Vest.mashinostr. 44 no.3:86 Mr '64. (MIRA 17:4

STRYZHAK, Aleksey Sil'vestrovich [Stryzhak, O.S.]; BAHMUT, A. Y.
[Bahmut, A.I.], kand. fil. nauk, otv. red.; DEMENT'YEVA,
V.Ye. [Dement'ieva, V.IE.], red.; VIRICH, D.V.[Virych,
D.V.], tekhn. red.

[Names of rivers in Poltava Province] Nazvy richok Poltav-
shchyny. Kyiv, Vyd-vo AN Ukr.RSR, 1963. 110 p.

(MIRA 16:12)

(Poltava Province--Names, Geographical)

AUTHOR: Bagmut, G.A., Candidate of Technical Sciences 113-58-7-4/25

TITLE: The Determination of the Degree of Clearance of Cylinders of Two-Cycle Engines (Opredeleniye stepeni ochistki tsilindrov dvukhtaknykh dvigateley)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 7, pp 8-12 (USSR)

ABSTRACT: An accurate calculation of the processes of the elimination of fuel combustion products and filling of the cylinders with scavenging air is still so difficult that several assumptions simplifying the calculation must be included. The article suggests the splitting up of the air current, breaking up the entire flow in the cylinder into elementary streams by aid of approximate graphical and grapho-analytical methods of hydrodynamics (Figures 1,2,3). This can be done by the approximate method devised by S.F. Aver'yanov. The theoretical models of the cylinders of the engines of the YaAZ-204 (Fig. 2) and the German Volkswagen (Fig. 4) are analyzed by this method. Diverse graphical and mathematical solutions are presented. There are 5 graphs, 2 diagrams and 4 Soviet references.

1. Diesel engines--Performance
2. Diesel engines--Design
3. Diesel engines--Exhaust systems

Card 1/1

BAGMUT, G.A.

Plane problem in the hydrodynamic theory of scavenging cylinders of
a two-cycle engine. Sbor. trud. lab. gidr. mash. no.7:162-176 '58.
(MIRA 12:9)

(Gas and oil engines--Cylinders)

BAGMUT, S., inzh.

Economical types of mine surface buildings. Prom. stroi. 1 inzh.
soor. 5 no.3:24-27 My-Je '63. (MIRA 16:7)

(Mine building)

BARINOV, A.; LYUBENKO, G.; BAGMUT, S.; VIRABOV, S.; MALIOVANOV, D.I.,
kand. tekhn. nauk; KRAKHMALEV, A.A., kand. tekhn. nauk (Donetsk)

Concerning the book "Layout of mine buildings and strip
mines." Ugol' 39 no.3:77-78 My'64. (MIRA 17:5)

BAGMUT, S.I., kand. arkhitektury; VEYSBEYN, V.D., inzh.

Problems in designing buildings of coal preparation plants.
Prom. stroi. 42 no.5:5-6 '65. (MIRA 18:8)

1. Donetskiiy Promstroyniiprojekt.

BAGMUT, S.I., arkhitektor

Increase the economical aspects of hoisting machine buildings.
Shakht.stroi. no.1:9-12 Ja '60. (MIRA 13:5)

1. Donetskoy nauchno-issledovatel'skiy institut nadshakhtnogo
stroitel'stva
(Mine buildings)

BAGMUT, S.I., arkhitektor; VIRABOV, S.A., inzh.

Automatic protective device for rope passage apertures. Ugol' Ukr.
4 no.7:34-35 J1 '60. (MIRA 13:8)
(Hoisting machinery)

BAGMUT, S.I., arkhitektor

Shortcomings of surface arrangements in standard
coal mine designs. Shakht.stroi. 4 no.9:10-12
S '60. (MIRA 13:8)

1. Donetskii nauchno-issledovatel'skiy institut
nadshakhtnogo stroitel'stva.
(Coal mines and mining ~~Equipment and supplies~~)
(Mine buildings)

L 09137-67 EWT(m)/ENP(j) IJP(o) RM

ACC NR: AP6031202

SOURCE CODE: UR/0229/66/000/008/0063/0063

29
22

AUTHOR: Bagnenko, F. M.; Kayda, Yu. A.; Prokhorov, N. P.; Dudko, T. V.

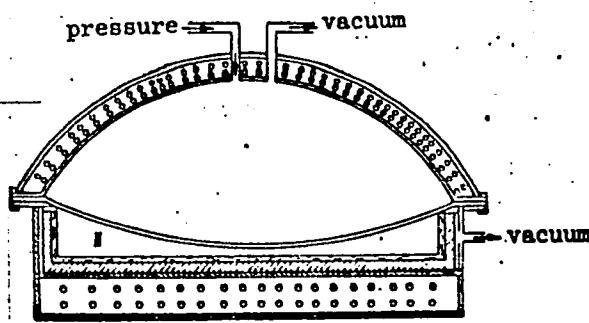
ORG: None

TITLE: Production of fiberglass-reinforced plastic products

SOURCE: Sudostroyeniye, no. 8, 1966, 63

TOPIC TAGS: fiberglass, reinforced plastic, plastic fabricating machinery

ABSTRACT: The authors describe the development of a unit for combination forming of cabin doors and heat control panels. The unit was produced at the Kherson Shipbuilding Plant and is composed of a pressing chamber and vacuum chamber (see figure). The pressing chamber is a welded dome-shaped cover equipped with an insulated jacket. The vacuum chamber has doors which are air-tight. A diaphragm is placed between the pressing and the vacuum chambers. This diaphragm does the actual pressing. The unit is heated by tubular electric



Card 1/2

UDC: 678.029.46:666,189.211

L 09137-67

ACC NR: AP6031282

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heaters. The working temperatures are from 20 to 180°C and are automatically controlled. The following components are used for the products: ¹⁵PN-3(VTU33122-60LSNKh) polyethylene resin, ASTT(6)C₂ and KhTK-1 glass fillers and PKhV-1 foam plastic filler. The filled dies are placed inside the chamber which is preheated to 80-90°C and hermetically sealed. The vacuum initially is set at 600-650 mm Hg and four atmospheres are allowed to pass through the pressure feed after 5 to 6 minutes. The vacuum becomes weaker over a period of 10 to 15 minutes. The entire process takes 30 to 40 minutes. After the molding operation is finished, the pressure in the upper chamber is reduced and the die casting mold is removed through the door. The shell is removed from the mold and filled with PKhV-1 filler after which the cover is glued on. The unit is then placed in a hydraulic press and held for 24 hours. Such doors are 2.5 times lighter than wooden doors and their production saves 12,350 rubles a year. Orig. art. has: 3 figures.

SUB CODE: 13/ SUBM DATE: None

Card 2/2 not

BAGNOVA, M. D.

BAGNOVA, M. D. — "The Treatment of Occupational Eczemas with Verbal Suggestion under Hypnosis." Moscow, 1955. (Dissertation for the Degree of Candidate in Medical Sciences). Acad Med Sci USSR.

So.: Knizhnaya Litopis', No. 7, 1956.

USSR/Pharmacology - Toxicology - Hormone Preparations.

V

Abs Jour : Ref Zhur Biol., No 4, 1959, 18662

Author : Sharapova, G.Ya., Bagnova, M.D.

Inst : -

Title : The Treatment of Patients with Alopecia Areata and Total Alopecia with ACTH and Cortine

Orig Pub : Probl. endokrinol. i gormonoterapii, 1958, 4, No 2, 111-112

Abstract : Observations were conducted on 20 patients with alopecia areata and total baldness or seborrheic hair thinning. To 5 patients with total baldness, ACTH was introduced intramuscularly in the dose of 15-20 units each daily; 600-700 units per course. To the remaining 15 patients, cortin was introduced subcutaneously in the amount of 1 ml 3 times per week each; 20-40 injections per course of treatment. Clinical cure was noted in 8, improvement in 8; no result in 4 patients. In possible recurrences

Card 1/2

BAGNOVA, M.D., kand.med.nauk

Clinical picture and prevention of occupational dermatoses caused by mycelium of biomyces. Sov.med. 22 no.1:109-112 Ja '58.
(MIRA 11:4)

1. Iz klinicheskogo sektora (nauchnyy rukovoditel' - doktor meditsinskikh nauk I.Ya.Sosnovik) Moskovskogo nauchno-issledovatel'skogo instituta sanitarii i gigiyeny imeni P.F.Erismana (dir. - kandidat meditsinskikh nauk A.Z.Belousov) Ministerstva zdoravookhraneniya RSFSR.

(SKIN DISEASES, etiol. & pathogen.

biomyces mycelium in poultry handlers (Rus))

(BIOMYCIN, inj. eff.

mycelium causing skin dis. in poultry handlers (Rus))

(OCCUPATIONAL DISEASES

skin dis. caused by mycelium of biomyces in poultry handlers (Rus))

SOSNOVIK, I.Ya.; BAGNOVA, M.D.; PUSHKINA, N.N.; UPOROV, D.V.

Clinical aspects of chronic poisoning by petroleum products.
Mag.med.zhur. 40 no.1:29-33 Ja-F '59. (MIRA 12:10)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta sanitarii
i gigiyeny im. F.F.Erismana (direktor - A.Z.Belousov).
(NOVOKUIBYSHEV--PETROLEUM WORKERS--DISEASES AND HYGIENE)

AL'TSHULER, N.S.; LITOVCHENKO, O.V.; YUKELIS, I.I.; DUBOVSKOY, P.A.;
PLETITSYNA, T.G.; BAGNOVA, M.D.; KOZEL'SKAYA, I.A.

Dynamics of tuberculosis of the skin in children in 1921-1954.
Vest.derm.i ven. 33 no.6:23-29 N-D '59. (MIRA 13:12)
(SKIN--TUBERCULOSIS)

ROSHCHIN, I.V.; NIFONTOVA, M.V.; PROKHOROV, Yu.D.; BAGNOVA, M.D.; KUBLANOVA,
P.S.; ILYASOVA, S.V.; BULYCHEV, G.V.

Hygienic characteristics of the dust factor, and health of workers
engaged in cleaning boilers of electric stations. Uch.zap.Mosk.
nauch.-issl.inst.san.i gig. no.8:64-70'61. (MIRA 16:7)
(LUNGS—DUST DISEASES) (BOILERS)

BAGNOVA, M.D.

Occupational skin diseases induced by pitch. Uch.zap.Mosk.
nauch.-issl.inst.san.i gig.no.8:79-82'61. (MIRA 16:7)
(SKIN—DISEASES) (PITCH—PHYSIOLOGICAL EFFECT)

BAGNOVA, M.D.

Occupational dermatitis as an effect of the synthetic
washing powder "Novost". Uch. zap. Mosk. nauch.-issl.
inst. san. i gig. no.9:56-58 '61 (MIRA 16:11)

*

BAGNOVA, M.D. (Moskva)

Occupational skin diseases in workers of the Sukhona wood-
pulp and paper combine. Gig.truda i prog.zab. no.11:52-54 '61.
(MIRA 14:11)

1. Moskovskiy nauchno-issledovatel'skiy institut gigiyeny imeni
F.F. Erismana.
(VOLOGDA PROVINCE--PAPER INDUSTRY WORKERS--DISEASES AND HYGIENE)

VYALOV, A.M.; BAGNOVA, M.D.; BULYCHEV, G.V.; BYLOV, I.S.; GENKIN, A.G.;
KUBLANOVA, P.S.; PUSHKINA, N.N.; YUSHKEVICH, L.B.

Comparative evaluation of health conditions in workers employed in
producing synthetic fatty acids and higher fatty alcohols. Gig. i
san. 26 no.4:15-21 Ap '61. (MIRA 15:5)

1. Iz klinicheskogo otdela Moskovskogo nauchno-issledovatel'skogo
instituta gigiyeny imeni F.F.Erismana Ministerstva zdravookhraneniya
RSFSR.

(CHEMICAL INDUSTRIES---HYGIENIC ASPECTS)
(ACIDS, FATTY---PHYSIOLOGICAL EFFECT) (ALCOHOLS---PHYSIOLOGICAL EFFECT)

BAGNOVA, M.D., kand.med.nauk

Occupational diseases of the skin in workers of the core division
at the foundry works of the I.A.Likhachev Factory. Gig. i san.
26 no.5:100-102 My '61. (MIRA 15:4)

1. Iz klinicheskogo otdela Moskovskogo nauchno-issledovatel'skogo
instituta gigiyeny imeni F.F.Erismana Ministerstva zdavookhraneniya
RSFSR.

(SKIN--DISEASES)

(COREMAKING--HYGIENIC ASPECTS)

BAGNOVA, M.D., nauchnyy sotr.; VASIL'YEV, A.S., nauchnyy sotr.; GEYZER, I.M., nauchnyy sotr.; YEFIMOV, N.A., nauchnyy sotr.; LUK'YANOV, V.S., nauchnyy sotr.; PANKOVA, V.M., red.; KOROBOVA, N.D., tekhn. red.

[Living and health]Byt i zdorov'e. Moskva, Profizdat, 1962. .
149 p. (MIRA 15:9)

1. Moskovskiy nauchno-issledovatel'skiy institut gigiyeny im. F.F.Erismana (for all except Pankova, Korobova).
(HYGIENE)

BAGNOVA, M., kand.med.nauk

Skin infections can be prevented. Okhr.truda i sots.strakh. 5
no.11:43 N '62. (MIRA 15:12)
(Skin—Care and hygiene)

BAGNOVA, M.D., kand.med.nauk

Prophylaxis for suppurative skin diseases. Med. sestra 22 no.8:
55-56 Ag'63. (MIRA 16:10)
(SKIN—DISEASES) (INDUSTRIAL HYGIENE)

VYALOV, A.M.; BAGNOVA, M.D.; VASIL'YEV, A.S.; PUSHKINA, N.N.; YUSHKEVICH,
L.B.; BULYCHEV, G.V.; BYLOV, I.S.; GENKIN, A.G.; ZHIDKOVA, L.V.;
ZHIGULINA, L.A.

Early changes in the state of health of workers in the cumene
process of phenol and acetone production. Uch. zap. Mosk. nauch.-
issl. inst. san. i gig. no.9:13-16 '61 (MIRA 16:11)

*

VYALOV, A.M.; BAGNOVA, M.D.; KUBLANOVA, P.S.; PUSHKINA, N.N.; BULYCHEV, G.V.:
BYLOV, I.S.; GENKIN, A.G.; KOTEL'NIKOVA, M.P.; SKLYANSKAYA, V.S.

Changes in the health of workers engaged in the production of
synthetic fatty acids. Uch.zap. Mosk.nauch.-issl. inst. san.
i gig. no.9:50-54 '61 (MIRA 16:11)

*

MORDUKHOVICH, N.G.; BELYAYEV, M.M.; MOZHAYSKAYA, L.Ya.; NIKOLENKO, V.I.;
BAGNYUK, V.S.

Use of "KF-9" plastics and their modifications in small high-frequency
switches. Plast.massy no.12:54-57 '63.
(MIRA 17:2)

BAGO, F.

The condition of Hungarian bauxite mining.

P. 161: (Magyar Bányászati és Kohászati Egyesület) Budapest
Vol. 12, No. 3, Mar. 1957.

SO: Monthly Index of East European Accessions (AMEI) Vol. 6, No. 11 November 1957.

BACO, P.

The situation in regard to Hungarian bauxite mining.

P. 230 (Magyar Bányászati és Kohászati Egyesület) Budapest
Vol. 12, No. 3, Mar. 1957.

SO: Monthly Index of East European Accessions (AEEI) Vol. 6, No. 11 November 1957.

HUNGARY / Cosmochemistry. Geochemistry. Hydrochem- D
istry.

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70441.

Author : Bago, F.

Inst : Not given.

Title : The Mining and Geological Conditions and Loca-
tion of the Opening of the Bauxite Mine in
Khalimba.

Orig Pub: Banyasz. lapok, 1958, 13, No 1, 27 -34.

Abstract: The basic data on geology and composition of
ores from two sections are given. In addition
to the major components:
(Al_2O_3 43.1 - 57.2; SiO_2 2.9 - 15.6,
 FeO_3 18.2 - 31.8%), the ores contain iron (%).

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Card 1/2

HUNGARY / Cosmochemistry, Geochemistry. Hydrochem- D
istry.

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70441.

Abstract: V_2O_5 0.09 - 0.12, Cr_2O_3 0.01 - 0.04, MnO_2 -
0.10 - 0.20, Ga_2O_3 0.0032 - 0.012, Li_2O_3
0.003 - 0.014, BeO 0.0006 - 0.00072, ZrO_2
0.023 - 0.039, Ni_2O_3 0.0082 - 0.021, Co_2O_3
0.0010 - 0.0068, SrO 0.031 - 0.085.

Card 2/2

BAGO, Ferenc, okleveles banyamernok

Technical and economic effect of applying steel supports
in the logwall system on the Hungarian coal mining. Pt.1.
Bany lap 93 no.7:433-443 J1 '60.

1. Nehezipari Miniszterium Szenbanyaszati Foosztalya.

BAGO, Ferenc, okleveles banyamernok

Technical and economic effect of applying steel supports
in the longwall system on the Hungarian coal mining. Pt.2.
Bany lap 93 no.8:505-517 Ag '60.

1. Nehezipari Miniszterium Szenbanyaszati Foosztaly.

BAGO, Laszlo; MAGYAROSY, Ferenc, dr.

Settling certain questions relating to the expropriation procedure. Geod kart 16 no.2:119-126 '64

BAGO, Laszlo; MAGYAROSY, Ferenc, dr.

Remark on the article "Current questions of land registration
and the process of expropriation." Geod kart 16 no.6:444-
445 '64.

L 13340-66

ACC NR: AP6007272

SOURCE CODE: HU/0017/65/017/001/0019/0026

AUTHOR: Bago, Laszlo

ORG: none

TITLE: Technical operations in surveying of residential plots

SOURCE: Geodezia es kartografia, v. 17, no. 1, 1965, 19-26

TOPIC TAGS: ground survey, general construction, civil engineering

ABSTRACT: The surveyor's duties in fulfilling the stipulations of the regulations issued by the Ministry of Construction (Epitesugyi Miniszterium) were discussed, insofar as they pertain to the surveying of residential plots. The official entities entitled to such surveying, the requirements for the surveys from a technical and official angle, the means of preparing the surveys, and the procedures for obtaining the building permits and registration certificates were discussed. The drawings that are to accompany the applications are governed by specific regulations; these were described. [JPRS]

SUB CODE: 08, 13 / SUBM DATE: none / ORIG REF: 012

Card 1/1 *FW*

UDC: 528.441.21

AVRAMENKO, V.N., inzh.; BAGOCHYUNAS, V.M., inzh.; DMITRIYEV, Yu.V., kand.
tekhn. nauk

Flat roofs for industrial buildings made of hollow decks of air
flues. Prom. stroi. 41 no.6:18-22 Je '64. (MIRA 17:9)

FILEP, Aladar, dr., korhazai foorvos; BAGOLY, Pal, dr., korhazai adjunktus.

Surgical therapy of cancer of the uterus. *Magy. noorv. lap.* 18 no. 6:321-336 Nov 55.

1. Csongradmegyei Tanacs Korhaza, Szentes, Szuleszeti es
Nogyogyaszati Osztalyanak kozlemenye.

(UTERUS, neoplasms
surg., technic & postoperative radiother.,
follow-up.)

(RADIOTHERAPY, in various diseases
cancer of uterus, postoperative use.)

BAGOLY, Pal., dr.; SZALAY, Gyorgy, dr.

Premature labor in tuberculosis. Orv.hetil. 101 no.48:1706-1707
27 N'60.

1. Csongrad megyei Tanacs Korhaza, Szentos, Tbc. Szuleszeti Osztaly.
(TUBERCULOSIS PULMONARY in pregn)
(INFANT PREMATURE)

SZALAY, Gyorgy, dr.; BAGOLY, Pal, dr.

Extrapulmonary tuberculosis in pregnancy. Orv. hetil. 102 no.39:
1845-1849 24 S '61.

1. Szentesi Megyei Korhaz Tbc Szuleszeti Osztaly.

(TUBERCULOSIS in pregn) (PREGNANCY compl)

BAGON, M. T.

BAGON, M. T.

Treatment of acute and chronic hepatitis with fresh extracts of the pancreas. Klin. med., Moskva 28:6, June 50. p. 65-9

1. Moscow.

GLML 19, 5, Nov., 1950

BAGOSI, E.

Large-scale production of grass seed. p. 306. AGRARTUDOMANY.
(Micsurin Agrartudományi Egyesület) Budapest. Vol. 8, no. 7, July 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress.
Vol. 5, No. 11, November 1956.

BAGOTA, M.

"Problem of Youth in the Polish Anglers Association." P. 19,
(GOSPODARKA RYBNA, Vol. 5, No. 11, Nov. 1953. Warszawa, Poland.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3,
No. 12, Dec. 1954, Uncl.

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
ABSOITSKAYA, I. A. PROCESSES AND PROPERTIES INDEX The velocity of fall of mercury drops in a viscous medium. 1. A. E. Gotskaya and A. N. Prumkin. <i>Compt. rend. acad. sci. U.R.S.S.</i> 55, 131-6(1947)(in English); cf. <i>C.A.</i> 40, 3249, 8044. The velocity of fall of Hg drops, 0.4-0.5 mm. radius, in glycerol contg. 1-3% H_2O and Na_2SO_4 or KBr as electrolyte was detd., with suitable corrections by Faxen's formula for the effect of the vessel walls and the hydrodynamic interaction of the falling drops in the column. In the presence of dissolved O_2 and with a small elec. cond. the drops fell at a rate in agreement with Stokes' formula. The charge on the drops after a certain time of contact with a soln. contg. dissolved O_2 is independent of its initial value. After removal of dissolved O_2 by bubbling H_2 through the soln. for 20 hrs., the values of the ratio, α, the velocity of fall of the liquid drop, w, to that of the velocity of fall of a solid sphere, w_s, varies between 1.03 and 1.47, depending on the charge, and approaches 1.5 times the value of α, at small charges. The addn. of surface-active agents, such as amyl and octyl alcs., did not cause any appreciable change in the form of the curves. Values calcd. by the theoretical equation derived, agreed with the observed values. A. F.																																																			
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION																																																			
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BAGOTSKAYA, I. A.

The potentials of falling drops. I. Bagotskaya and V. Frumkin (Inst. Phys. Chem., Acad. Sci. U.S.S.R., Moscow). *J. Phys. Chem.* (U.S.S.R.) 21, 1003-43 (1947) (in Russian). -Hg drops, 1.2 mm. in diam., were forced from a capillary and fell in a KBr soln. in glycerol (88.90, 11.10) 1.2%. When still attached to the Hg in the capillary, they were polarized by means of an auxiliary electrode. The polarization altered their surface charge σ which was calcd. from $i = \sigma A$, i being the current carried by the drops and A the area of the Hg/soln. interface formed in 1 sec. The sedimentation potential E between the top and the bottom of the glycerol column was measured as a function of σ . In N KBr E was almost independent of σ at large pos. σ , became zero at very small neg. σ , and changed its sign at greater neg. σ values. In 0.01 N and 0.015 N KBr E showed a max. at small pos. σ and a min. (i.e., a max. of the neg. E) at small neg. σ values. These results were observed after air was displaced from the soln. by H_2 ; in the presence of O_2 , E was almost independent of σ because the charge on the falling droplet was detd. by the compn. of the soln. rather than by the original polarization. The E values increased when the concn. of KBr decreased and reached about 0.1 v., i.e., were much greater than the sedimentation potentials of

solid insulating particles. A simplified theory of the effect is given (Levich, *C.I.* 42, 2156a). It shows, e.g., that the potential difference between the back and the front of a falling Hg drop was as high as 0.4 v. The theory predicts, in agreement with the expt., that the max. of E occurs at $\sigma = (3\mu\epsilon)^{1/2}$, μ being the viscosity and ϵ the elec. cond. of the soln. J. J. Bikerman

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

YISNI BDN173

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BAGUTSKAYA, I. A.

PROCESSES AND PROPERTIES INTER

4

The potential of falling [mercury] drops. A. Frumkin and I. A. Bagutskaya (Univ. Moscow). *J. Phys. & Colloid Chem.* 52, 1-11 (1948); cf. *C.A.* 41, 7202f. — In an O-free soln. of KBr and glycerol with a viscosity of 8-14 poises, Hg drops fall from a dropping-Hg electrode with a drop time of about 0.4 sec. at the rate of 1.0-1.2 cm./sec. The drops are polarized by an e.m.f. which is applied between the dropping-Hg electrode and a large Hg electrode in the same soln. The potential arising from the fall of the drops is measured against 3 Ag-AgCl electrodes spaced along the path of the drops. It is shown that the tangential motion of the surface of falling drops displaces the charges of the double layer from the lower

to the upper end of the drop, giving rise to a p.d. between the two ends. For drops of radius 0.6 mm., viscosity of the soln. 13, and elec. cond. 4×10^{-4} , the p.d. between the lower and the upper ends of the drop reaches 0.4 v. Measurements of the p.d. between various points of a liquid column in which the drops are falling are in fair agreement with values expected theoretically. In accordance with the theory of Frumkin and Levich (*C.A.* 40, 6044f) with increase in the charge density the abs. value of the potential of falling drops first increases, reaches a max., and then drops off. It also follows from these measurements that the relaxation time of the elec. double layer at the Hg-soln. interface in glycerol is less than 2×10^{-6} sec. Otto H. Müller

ASH-51A METALLURGICAL LITERATURE CLASSIFICATION

BAGOTSKAYA, I. A.
CA

2

Movement of liquid and solid metal particles in electrolyte solutions. V. Experimental test of the equations for movement of mercury drops in an electric field. I. A. Bagotskaya. *Zhur. Fiz. Khim.* 23, 1231-8(1949); cf. *C.A.* 42, 3678h, and Prunkin and Levich, *C.A.* 42, 5355b. —Hg fell in drops (radius 0.036 cm.) through KBr solns. in glycerol (η 2.6-3.3 poises) at 21-22°. The drops during their formation were charged by current i , and the charge q was calcd. as i/A , A being the drop area formed in 1 sec. (about 2×10^{-4} sq. cm./sec.). The solns. were satd. with H_2 to avoid variation of η during descent. Along about 3 cm. of their path, the drops were subjected to a horizontal electrostatic field of 0.25-1.5 v./cm.; the field strength was detd. by Ag/AgBr sounders. From the horizontal deviation of the drops their mobility V in cm./sec. in the elec. field was calcd. When q varied between $+35$ and -30×10^{-8} coulomb/sq. cm. and the elec. cond. κ between 10^{-2} and 10^{-3} ohm $^{-1}$ cm. $^{-1}$, V roughly followed the equation $V = q/(2\eta + \kappa^2)$ (cf. *C.A.* 40, 3328g). V was ≈ 0 at a small neg. q (instead of at $q = 0$) presumably because some H_2 was still present in the soln. At low κ , the max. V was too small, presumably because the potential gradient over the diam. of the drop became of importance. The max. V was, e.g. 2.4, 9, and 22 for pos. Hg drops at $\kappa = 1.9 \times 10^{-3}$, 2.5×10^{-4} , and 10^{-5} , resp.; hence, it was about 10 3 times as great as electrophoretic mobilities. Pyridine and trimethylpyridine do not affect V ; naphthylamine (0.1 M) lowers V . J. J. Bikerman

CA BAGUTSKAYA, I. A.

2

Rate of fall of mercury drops in viscous medium. I. A. Bagutskaya (Acad. Sci. U.S.S.R., Moscow). *Zhur. Fiz. Khim.* 24, 1-6(1950); cf. C.A. 42, 2825g.—Hg drops (radius $r = 0.036$ cm.) fell in a KBr soln. in glycerol ($\eta = 2.5$ poises). When the distance d between 2 consecutive drops was less than, say, 50 r , the rate u of fall increased with the ratio $r:d$; e.g., at $r:d = 0.12$, u sometimes was 1.15 u_0 (u_0 is the rate of fall of a single drop). When u_0/u , (u_0 = the rate calcd. from Stokes' equation) was large (e.g. 1.47), u/u_0 was near 1 and sometimes even less than 1. The ratio u_0/u had a max. (about 1.4) when the drops carried a charge e of about 3×10^{-4} coulomb/sq. cm.; this max. was steep in 0.01 N KBr and shallow in 0.5 N KBr. The dependence of u_0/u on e is accounted for by the earlier theory. In an acidified (with HNO_3) 0.38 N $HgNO_3$ soln. in glycerol u_0/u was 1.37. This high velocity cannot be explained by the effect of e , which was about 7×10^{-4} ; there must have been transfer of Hg ions across the drop/soln. boundary. In 0.1 M $C_6H_5NH_2$ + 0.7 N KBr in glycerol the greatest u_0/u was 1.24; surface-active substances reduce the tangential movements in the drop (as in suppressing polarographic max.) and hence increase the friction between drop and soln. $AmOH$, octyl alc., and $PhNH_2$ had less effect. The values of u_0/u , near 1 found by the previous experimenters, e.g., Silvey (*Phys. Rev.* 7, 106(1916)) were due to low elec. cond. of the medium and the presence of O and surface-active impurities. J. J. Bikerman

CA BUDGETARY, I. A.

4

Mechanism of mercury oxidation in electrolyte solutions.
 I. A. Bagotzskaya (Acad. Sci. U.S.S.R., Phys.-Chem. Inst., Moscow). *Zhur. Fiz. Khim.* 25, 450-57 (1951).—The soln. of Hg in 2 N H₂SO₄ in an atm. of O₂ proceeds through an electrochem. mechanism: $O_2 + 2H^+ + 2e \rightarrow H_2O_2$ (1) and $Hg \rightleftharpoons Hg^{2+} + 2e$ (2). This is shown by the following observations: (1) There is equivalence between the amt. of Hg dissolved and the amt. of H₂O₂ formed in soln.; this can be seen with the help of polarograms of the soln. which can be compared to polarograms obtained with synthetic solns. contg. equiv. amts. of Hg and H₂O₂. This is in agreement with some data of Kolthoff (*C.A.* 34, 6549P). (2) The rate of soln. of Hg at a Hg electrode depends on the electrode potential and can be detd. from the kinetics of electrolytic reduction of O₂. The latter is investigated by means of polarization curves at a Hg electrode at conditions such that the reduction of O₂ is the only electrode reaction taking place.
 Michel Boudart

BAGOTSKAYA, I.A.

Effect of anions on the solution of mercury in electrolytic solutions
in the presence of oxygen. Zhur, Fiz.Khim. 26, 659-68 '52. (MLRA 5:8)
(CA 47 no.13:6269 '53)

1. Institut fizicheskoy khimii, Akademiya nauk S.S.S.R., Moscow.

BAGOTSKAYA, I. A.

BA 239T19

USSR/Chemistry - Electrochemistry
Diffusion

Aug 52

"Diffusion in Liquids During Turbulent Mixing,"
I. A. Bagotskaya

"DAN SSSR" Vol 85, No 5, pp 1057-1060

A rotating, disk-shaped Cu electrode was used in the study of diffusion in liquids. The rpm of the electrode were measured stroboscopically and varied between 500 and 1750. It developed that the diffusion, and hence the limiting current, is linearly related to the rpm and not proportional to its square root as in laminar mixing. Submitted by Acad A. N. Frumkin 19 Jun 52.

239T19

BAGOTSKAYA, I.A.

Stationary potentials and the kinetics of self-dissolution of amalgams
in the presence of oxygen. Zhur. Fiz. Khim. 27, 362-9 '53. (MLRA 6:5)
(CA 47 no.19:9823 '53)

1. Inst. Phys. Chem., Acad. Sci. U.S.S.R., Moscow.

BAGOTSKAYA, I. A.

Journal of the Iron and Steel Inst.
June 1954
Properties and Tests

and

BTR

June 1954

2
The Influence of Surface Active Substances on the Penetration of Hydrogen into Iron and the Mechanism of the Hydrogen Over-Potential. I. A. Bagotskaya and A. N. Kravkin. (Doklady Akademii Nauk S.S.S.R., 1953, 82, (8), 879-882). (In Russian). A study of the transfer of the hydrogen over-potential through an iron diaphragm with the simultaneous measurement of the amount of hydrogen diffused through it during cathodic polarization in solutions of pure 1N HCl and in the presence of an inhibitor (tetrabutylammonium sulphate with potassium bromide) is described. On additions of arsenic to the polarization cell in concentrations of 10^{-6} — 10^{-4} M, with and without the inhibitor, the change of potential under the influence of the diffusing hydrogen was not observed. This result is in opposition to the views expressed in the literature that the increased diffusion of hydrogen, observed in the presence of arsenic, is due to the slower removal of hydrogen from the diaphragm surface.—V. G.

BAGOTSKAYA, I. A.

which results in a rapid diffusion state (the mechanism of

BAGOTSKAYA, I.A.

Redox properties of diffuse atomic hydrogen on the surface of
a polarized electrode in alkaline solutions. Dokl. AN SSSR
110 no.3:397-400 S '56. (MIRA 9:12)

1. Institut fizicheskoy khimii Akademii nauk SSSR. Predstavlene
akademikom A.N. Frumkinym.
(Hydrogen) (Electrochemistry)

AUTHORS: Oshe, A. I., Bagotskaya, I. A. SOV/ 76-32-6-29/46

TITLE: The Effect of Diffusing Atomic Hydrogen on the Hydrogen Excess Voltage η on Iron and Its Galvanic Coatings in Basic and Acid Solutions (Vliyaniye diffundiruyushchego atomarnogo vodoroda na perenapryazheniye vodoroda η na zheleze i nanesennykh na nego gal'vanicheskikh osadkakh v rastvore shchelochi i kisloty)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 6, pp. 1379-1388 (USSR)

ABSTRACT: Investigations on the effect of an artificial increase of the concentration of atomic hydrogen at the electrode surface on the kinetics of its electrochemical separation may supply information on the mechanism of this reaction, which fact had already been observed by A. N. Frumkin (Ref 1). In the present paper the problem mentioned in the title was investigated in the case of galvanic copper and nickel depositions on iron and in 1n NaOH solutions, as well as on pure iron and on iron blanché with tin and mercury; it was also investigated in the case of galvanic depositions of tin, nickel and copper in 1n H₂SO₄ solutions, the method applied remaining the same as in an earlier paper. As may be seen

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The Effect of Diffusing Atomic Hydrogen on the Hydrogen Excess Voltage η on Iron and Its Galvanic Coatings in Basic and Acid Solutions SM/6-32-6-29/46

from an experimental part the authors used Armco iron; the graphically represented experiments in the NaOH solution show that η increases in the case of the nickel deposition with small cathode polarization under the action of diffusing hydrogen, and that it decreases with a higher one; in the case of galvanic copper depositions, however, η always increases. In the case of a treatment of the galvanic depositions with mercury these effects change, however. The investigations in sulfuric acid solutions in the case of pure iron, iron blanché with lead and the galvanic depositions tin and copper did not display any influence of the diffusing hydrogen on η , while in the case of iron blanché in mercury a smaller effect was observed; this may be explained by a higher velocity of reformation of the atomic hydrogen (as compared to the alkaline medium). In the explanations of the observed effects the works by Gerischer and Mehl (Refs 8,9) are mentioned and it is pointed out that the dependence on the electrode polarization could not be taken into account. In order to obtain a comparison of the theoretical derivations with the experiment the influence of the amperage of the diffusing hydrogen i' on η

Card 2/3

The Effect of Diffusing Atomic Hydrogen on the Hydrogen Excess Voltage η on Iron and Its Galvanic Coatings in Basic and Acid Solutions DV/76-32-6-29/46

in the case of an electrode polarization with constant amperage was carried out, and it was found that in the beginning there is an increase which later on converges to a certain value, or that the decrease of the excess-voltage grows in the beginning and then approaches a limit value in the case of a polarization increase with constant i'/i . The observed effects of the decrease of the excess voltage were greater than those calculated theoretically. Finally the authors thank A.N. Frumkin, Member, Academy of Sciences, USSR. There are 9 figures and 9 references, 6 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskoy khimii, Moskva (Moscow, Institute of Physical Chemistry, AS USSR)

SUBMITTED: February 22, 1957

1. Hydrogen--Diffusion
2. Hydrogen--Electrochemistry
3. Metal coatings--Electrochemistry
4. Sodium hydroxide--Electrochemistry
5. Mercury--Electrochemistry

Card 3/3

S/076/60/034/007/020/042/XX
B004/B068

AUTHORS: Bagotskaya, I. A., Kovba, L. D., and Oshe, A. I.
TITLE: Study of the Effect of Diffusing Atomic Hydrogen on the
Kinetics of Its Electrochemical Evolution
PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 7,
pp. 1508-1516

TEXT: The effect of hydrogen diffusion on the kinetics of its electro-chemical evolution was studied in Refs. 1-4 using an iron membrane fixed between two vessels and sealed with vacuum grease. Since a disturbing effect of the vacuum grease on the overvoltage η was suspected, the authors repeated their experiments with a new device shown in Fig. 1. A dish made of Armco iron (2 cm in diameter; about 1 cm high; wall thickness: 0.1 to 0.07 mm) was connected to a platinum contact by means of an iron clamp. The outside surface of the dish was polarized, and the inside surface was exposed to diffusion. Cell 1 contained hydrogen gas. The dish was filled from containers 2 and 3 with 1 N NaOH saturated with H_2 to a height of 2 to 3 mm. The inside surface of the dish was cathodically polarized with

Card 1/4

Study of the Effect of Diffusing Atomic Hydrogen on the Kinetics of Its Electrochemical Evolution

S/076/60/034/007/020/042/XX
B004/B068

the platinum anode 4, and the diffusion potential φ_d was measured with respect to the reference anode 5. As soon as φ_d had reached a constant value, 2 N H_2SO_4 saturated with H_2 and containing traces of $Pb(NO_3)_2$ was pumped from container 8 into cell 1 such that it touched the bottom of the dish. The dish was temporarily polarized anodically. Hydrogen diffusion was discontinued by using hydrogen-saturated NaOH from container 11 instead of the acid solution. These experiments were performed with pure Armco iron, mercury-poisoned iron, and zinc-plated iron. The results were in agreement with the ones obtained previously. Overvoltage η was increased on non-poisoned iron and lowered on Hg-poisoned iron by hydrogen diffusion. The increase in Δi of the rate of electrochemical hydrogen evolution in the presence of diffusing atomic hydrogen was determined on Hg-poisoned iron and zinc-plated iron with $\eta = \text{const}$. For a given rate of diffusion i' , the amperage i was measured. For $\Delta i/i'$, the following values were found:

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Study of the Effect of Diffusing Atomic Hydrogen on the Kinetics of Its Electrochemical Evolution

S/076/60/034/007/020/042/XX
B004/B068

Electrode	Electrolyte	η	$(\Delta i/i')$
Fe + Hg	3 N NaOH	0.800	1.72
Fe + Hg	0.5 N NaOH	0.790-0.875	1.37
Fe + Zn	4 N NaOH	0.610	0.24
Fe + Zn	0.5 N NaOH	0.690	0.1

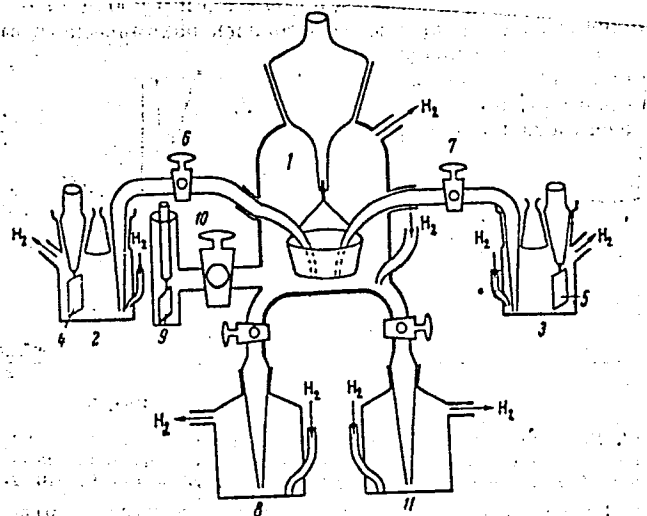
Moreover, the effect of i' , of the cathodic polarization of the electrode, and of the pH of the solution on $\Delta\eta$ was examined on Armco iron and nickel-plated iron. With constant cathodic polarization of the electrode $\Delta\eta$ increased with i' and approached a limit. Increase of η and decrease of pH led to a decrease of $\Delta\eta$. A. N. Frumkin is thanked for a discussion. There are 7 figures, 1 table, and 6 Soviet references.

ASSOCIATION: Akademiya nauk SSSR, Institut elektrokhimii
(Academy of Sciences USSR, Institute of Electrochemistry)

SUBMITTED: September 25, 1958

Card 3/4

S/076/60/034/007/020/042/XX
B004/B068



Card 4/4

BAGOTSKAYA, I.A.; KOVBA, L.D.

Rate of diffusion of electrolytic hydrogen, as affected by the condition of that side of an iron membrane where the diffusion begins. Dokl.AN SSSR 133 no.4:862-865 Ag '60.
(MIRA 13:7)

1. Institut elektrokhimii Akademii nauk SSSR. Predstavleno akademikom A.N. Frumkinym.
(Diffusion) (Hydrogen)

43469

S/076/62/036/012/003/014
B101/B180

26.2510 200467
AUTHOR:

Bagotskaya, I. A. (Moscow)

TITLE:

Effect of the solution composition on the rate of diffusion of electrolytic hydrogen through metal diaphragms. I.
Diffusion of hydrogen through iron diaphragms

PERIODICAL:

Zhurnal fizicheskoy khimii, v. 36, no. 12, 1962, 2667 - 2673

TEXT: The time dependence of H_2 diffusion through an iron diaphragm was measured for the following solutions: 2 N NaOH, 2 N H_2SO_4 , 2 N H_2SO_4 + 0.1 N KI, and 2 N H_2SO_4 + 0.1 N KI + 0.1 M $(C_4H_9)_4NI$. The diffusion side of the diaphragm was poisoned with As, Pb, or Hg, and cathodically polarized with $4 \cdot 10^{-4}$ a/cm². Results: The presence of any of these solutions, and poisoning, on the diffusion side, with As in acid or alkaline media, Pb in acid, or Hg in alkaline media, reduces the diffusion rate v_H considerably. The opposite occurs with the same factors on the polarization side. Fe poisoned with Pb in alkali or with Hg in an acid does not follow this rule. The recombination theory developed by N. I. Kobozev and V. V. Monblanova

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Effect of the solution ...

S/076/62/036/012/003/014
B101/B180

(Zh. fiz. khimii, 6, 308, 1935) according to which the binding energy and hydrogen are the decisive factors in diffusion, does not adequately explain the experimental results. Two processes are assumed to take place on hydrogen diffusion: hydrogen penetration of the metal during discharge, and its withdrawal into the solution by electrochemical desorption. These reactions are independent and probably occur on different parts of the diaphragm surface. The results obtained would then be explained by the relative value of changes in the activation energies of these reactions, and no definite dependence is necessary for the binding energy and over-voltage. There are 5 figures and 1 table.

ASSOCIATION: Akademiya nauk SSSR, Institut elektrokhimii (Academy of Sciences USSR, Institute of Electrochemistry)

SUBMITTED: April 15, 1961

Card 2/2

BAGOTSKAYA, I.A.

Effect of the electrical double layer structure on electrochemical
desorption. Dokl. AN SSSR 142 no.5:1105-1107 F '62.

(MIRA 15:2)

1. Institut elektrokhemii AN SSSR. Predstavleno akademikom
A.N.Frumkinym.

(Desorption)

(Electrochemistry)

44895

S/076/63/037/001/016/029
B144/B186

26.2570

AUTHORS:

Kovba, L. D., Bagotskaya, I. A.

TITLE:

Effect of the composition of the solution on the diffusion rate of electrolytic hydrogen through metal diaphragms. II. Hydrogen diffusion through palladium diaphragms.

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 161 - 168

TEXT: The separate and combined effect of the I^- and $(C_4H_9)_4N^+$ ions on the hydrogen diffusion through Pd diaphragms was studied in 1 N H_2SO_4 (a), 1 N H_2SO_4 + 0.03 N KI (b), 1 N H_2SO_4 + $5 \cdot 10^{-3}$ M $[(C_4H_9)_4N]_2SO_4$ (c), and 1 N H_2SO_4 + 0.03 N KI + saturated $(C_4H_9)_4NI$ (d) solutions with and without addition of Hg. After pretreatment of the diaphragm in (a) with $2 \cdot 10^{-3}$ a/cm² current, the polarization was stopped at the diffusion side and continued with $5 \cdot 10^{-3}$ a/cm² current at the polarization side until a constant H_2 diffusion rate was established. The potential at the diffusion side was 50 - 60 mv. About half of the H_2 forming diffused through the diaphragm.

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Effect of the composition ...

S/076/63/037/001/016/029
B144/B186

The effect of additions and Hg-poisoning of the diaphragm was studied in cathodic polarization, the respective current strengths being $i_{pol} = 5 \cdot 10^{-3} \text{ a/cm}^2$ and $i_{dif} = 0$. If I^- and Hg are introduced at the polarization side they increase the diffusion rate v_{dif} , whereas introduction at the diffusion side has the contrary effect. On KI addition at the polarization side, the overvoltage η increased to $\sim 80 \text{ mv}$ and 5/6 of the hydrogen formed diffused through the diaphragm. This is in agreement with the negative effect of I^- and Hg on the energy of the metal - H_{ads} bond and on the hydrogen overvoltage retarding the discharge and removal of the adsorbed H. In further tests the action of I^- on v_{dif} and η was investigated after the electrode had been kept for some time in (b) without cathodic polarization. Here η increased steadily while v_{dif} decreased. This observed inconsistency implies the probable existence of two types of Pd poisoning by I^- : a weak type with increasing v_{dif} and η , in which only the active centers of the Pd surface take part in the hydrogen discharge

Card 2/3